TECHNICAL EXHIBIT
APPLICATION FOR MODIFICATION OF CONSTRUCTION PERMIT
(FCC FILE NO. BMPTTL-20001222AAM)
LPTV STATION K56FQ
FACILITY ID 6754
BOISE, IDAHO
CH 49 150 KW (MAX-DA)

Technical Narrative

The technical exhibit of which this narrative is part was prepared in support of an application to modify the construction permit of LPTV station K56FQ at Boise, Idaho (Facility ID: 6754; File No. BMPTTL-20001222AAM). Specifically, this application proposes to change transmitter site, decrease the antenna radiation center height above mean sea level from 2146 meters to 1815 meters, increase the effective radiated power (ERP) from 18.7 kW to 150 kW, modify the antenna system and add a “zero” carrier frequency offset. No other changes are proposed, including no change in channel (49), or community of license (Boise). As detailed below, this application is considered a "minor change" in facilities pursuant to Section 73.3572.

It is proposed to side-mount the directional antenna on a new 60 meter supporting structure. The new tower does not require tower registration based on the FCC’s TOWAIR program. It is believed that the instant application conforms with all other applicable rules and regulations of the Federal Communications Commission.

Minor Change Application

Figure 1 depicts the authorized and herein proposed 74 dBu contours for K56FQ. As indicated, the proposed 74 dBu contour encompasses a portion of the authorized 74 dBu contour. Therefore, the proposed modification is considered a "minor" change in facilities pursuant to Section 73.3572.

Response to Paragraph 13(a) - TV Broadcast Station Protection

A study has been conducted using the provisions of Section 74.705 which indicates that the proposed K56FQ operation will not create prohibited interference to other existing, authorized or proposed NTSC full-power stations.

Response to Paragraph 13(b) - DTV Station Protection

Calculations based on OET Bulletin No. 69 indicate that the proposed K56FQ operation on channel 49 complies with the FCC's 0.5% interference threshold criteria to all allotted, proposed or actual DTV operating facilities on channels 48, 49 and 50.[1]

Response to Paragraph 13(c) – LPTV/TV Translator and Class A Station Protection

A study has been conducted using the provisions of Section 74.707 which indicates that the K56FQ proposal will not create prohibited interference to other existing, authorized or proposed LPTV, TV Translator and Class A stations with the exception of the licensed operation of K49EB on channel 49 at Garden Valley, ID (BLTT-19950828IH). However, based on the provisions of the OET-69 Bulletin as permitted by FCC rules [Section 74.707(e)] it is believed that K56FQ's proposed operation complies with the FCC's interference criteria towards K49EB. Specifically, calculations have been made using the procedures outlined in the FCC's OET-69 Bulletin and a 2 square kilometer grid. The results of the OET Bulletin No. 69 are tabulated on Figure 2 and, as indicated, the K56FQ proposal is not predicted to cause any interference to K49EB.

[1] The du Treil, Lundin & Rackley, Inc. DTV interference analysis program is based on the program and procedures outlined by the FCC in the Sixth Report and Order; subsequent Memorandum Opinion and Order; and FCC OET Bulletin No. 69. A nominal grid size resolution of 2 km was employed. An Alpha based processor computer system was employed. The results have been found to be in very close agreement with the results of the FCC implementation of OET Bulletin No. 69.

Environmental Considerations

The proposed K56FQ LPTV facilities were evaluated in terms of potential radio frequency radiation exposure at ground level in accordance with OST Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radiofrequency Radiation." The calculated power density at the base of the tower was calculated using the appropriate equation on Page 13 of the Bulletin. Using a greater than expected vertical relative field value of 0.16 (see vertical plane relative field pattern attached as Figure 3), a maximum visual effective radiated power of 150.0 kilowatts and 10 percent aural power, the calculated power density at 2 meters above ground level at the base of the tower is 0.0818 milliwatt per square centimeter (mW/cm2), or 18 percent of the Commission's recommended limit applicable to general population/uncontrolled exposure areas (0.46 mW/cm2 for TV channel 49). However, as this is a multi-user site, measurements will be made to substantiate compliance with the RF emission rules.

Access to the transmitting site will be restricted and appropriately marked with warning signs. Furthermore, as this is a multi-user site, an agreement will be in effect in the event that workers or other authorized personnel enter the restricted area or climb the tower to ensure that appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing “accepted” RFR protective clothing and/or RFR exposure monitors or scheduling work when the stations are at reduced power or shut down.

Finally, it is noted that this technical exhibit only addresses the potential for radiofrequency

electromagnetic field exposure. All other aspects of the environmental processing analysis will be or already has been provided to the FCC by the tower owner as part of the tower registration process.

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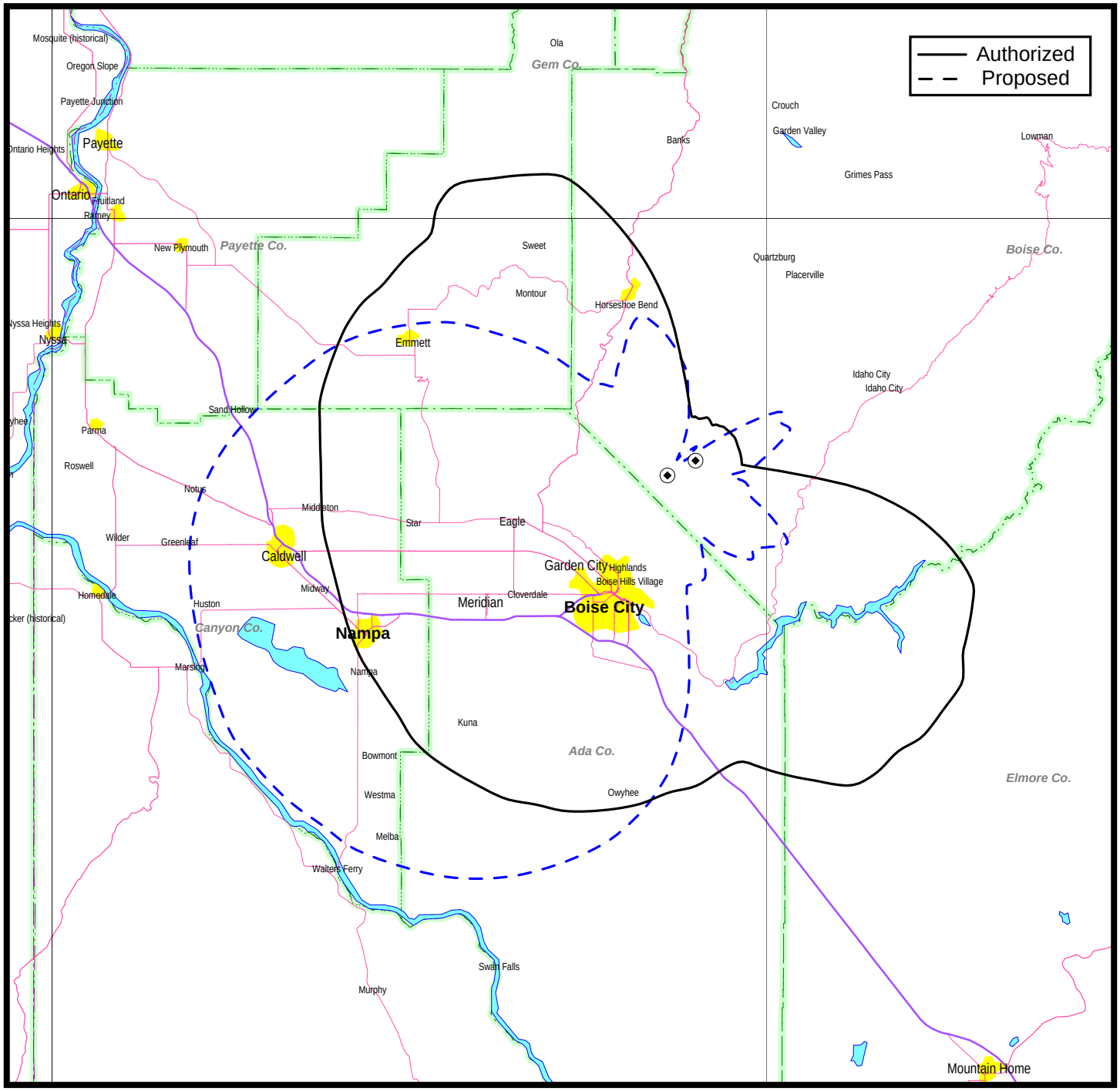
May 19, 2004

Figure 1



PREDICTED 74 dBu CONTOURS

LPTV STATION K56FQ
BOISE, IDAHO
CH 49 150 KW (MAX-DA)

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

OET-69 INTERFERENCE CAUSED STUDY

CELL SIZE : 2.00
Using offset in determining thresholds

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K49EB 44-01-48 115-49-35 49(N) 0.032 kw 1555 m DA 50.0 % 74.9 dBu
GARDEN VALLEY ID
LIC BLTT19950828IH
1.00 0.80 0.40 0.15 0.09 0.07 0.06 0.06 0.06 0.06 0.07 0.07
0.08 0.08 0.06 0.03 0.03 0.03 0.03 0.03 0.04 0.04 0.07 0.07
0.08 0.08 0.06 0.06 0.06 0.06 0.06 0.06 0.09 0.18 0.46 0.81
(5.0 0.95)(355.0 0.95)
Ref Az: 310.0
Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	8.016913	13
not affected by terrain losses	8.016913	13

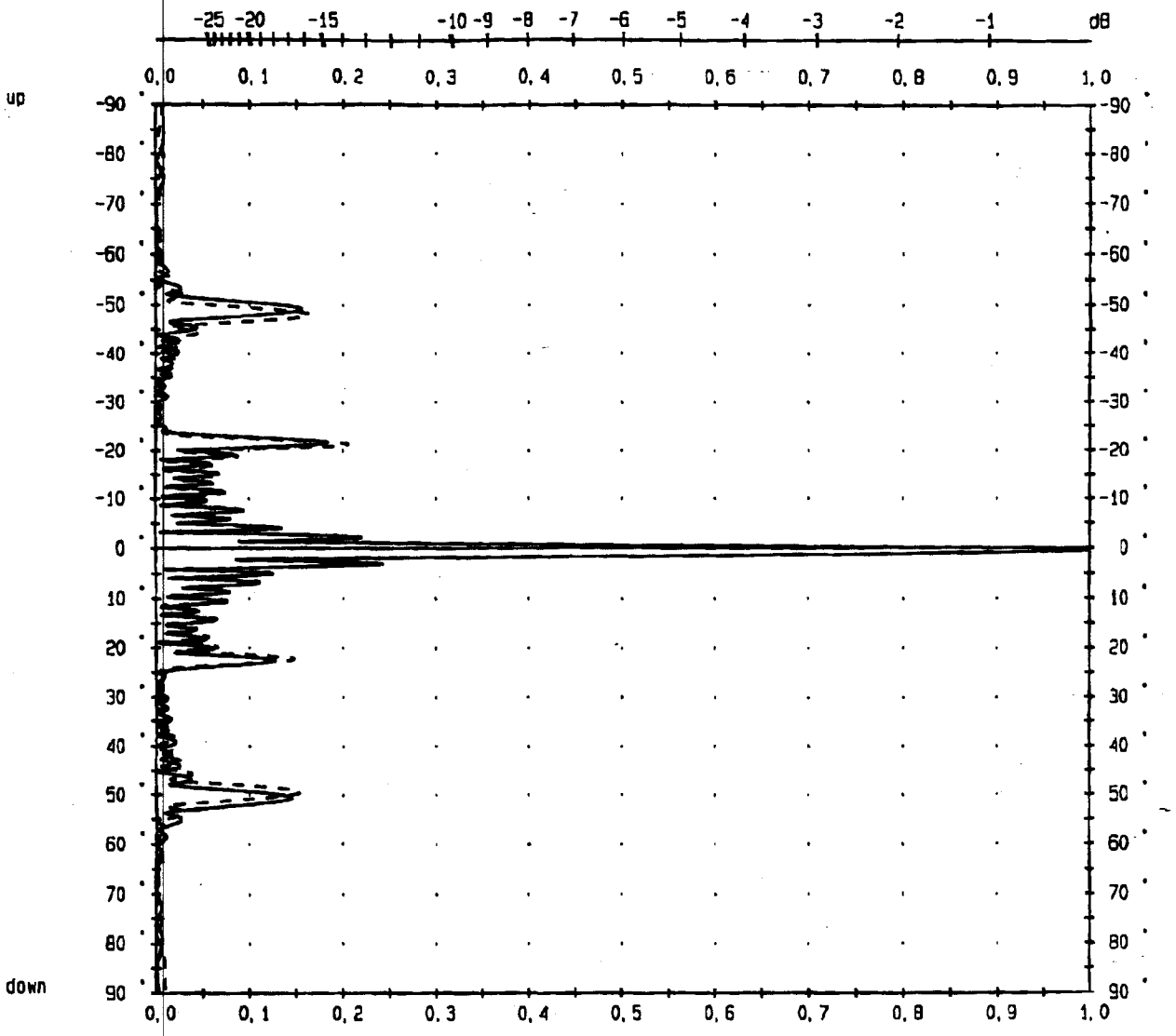
****
K56FQP 43-44-23 116-08-15 49(N) 150.000 kw 1815 m DA 10.0 % 74.9
BOISE ID
PROPOSED
1.00 0.96 0.87 0.73 0.56 0.42 0.27 0.15 0.07 0.05 0.06 0.07
0.07 0.06 0.04 0.02 0.05 0.01 0.12 0.10 0.05 0.02 0.04 0.06
0.07 0.07 0.06 0.05 0.07 0.05 0.27 0.42 0.56 0.73 0.87 0.96
Ref Az: 240.0
Using DEFAULT vertical antenna pattern

D/U Baseline: 45.00

	Area	Pop
Interference	0	0

Summary of Calculations

Facility	Channel	Type	Baseline	Permissible	IX	%Base
K49EB, GARDEN VALLEY, I 49	TV		13	0.5	0	0.00



frequency in MHz	681.250	693.250
azimut in °	240.0	
omni-dir in dBd	15.35	15.35

SCALA Medford Oregon	12x1 K723147 UHF-TV Panel Array	Typ Nr.
mj 14.5.** 15:34	Channel 49 and 51 w/ .5' EDT and 10% NF	Bl.: